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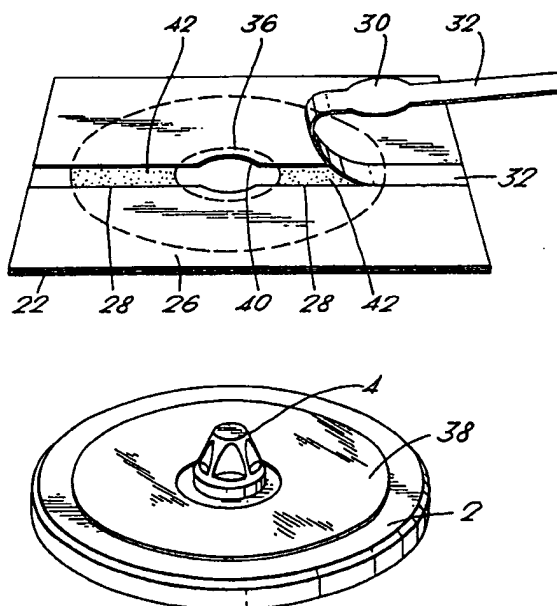
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(54) Title: A METHOD FOR APPLYING A LABEL TO A COMPACT DISC AND A LABEL AND A DEVICE FOR ACCOMPLISHING THE METHOD



(57) Abstract: In a method of applying a label (22) to a compact disc (38), the label having at a side surface an adhesive layer (24) provided with a covering sheet, the compact disc is fixed with regard to its position on a support surface (6) having an engagement device (4) for defining the label in relation to the compact disc. The label is fastened to the compact disc by means of the adhesive layer while being defined with regard to its position by means of the engagement device. Small area portions (32) of the covering sheet (26) are removed from the adhesive layer (24) of the label before the label is fastened to the compact disc (38). The label is thereupon fastened to the compact disc while being defined with regard to its position by means of the engagement device (4) by means of the portions (42) of the adhesive layer from which the covering sheet has been removed. The label is thereupon fastened to the compact disc by removing the other portions of the covering sheet (26) from the label (22). The invention relates also to a label and a device for accomplishing the method.

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A method for applying a label to a compact disc and a label and a device for accomplishing the method.

The present invention relates to a method for applying a label to a compact disc, the label having at a side surface an adhesive layer provided with a covering sheet, and a label and a device for accomplishing the method.

5 In a previously known method for applying a label to a compact disc, the label having at a side surface an adhesive layer provided with a covering sheet, the compact disc is positionally fixed on a support surface and the covering sheet is removed from the adhesive layer, whereupon the label is applied to the compact disc. The handling of the label provided with an adhesive layer subsequently to the removal of the covering
10 sheet often leads to problems as it is extremely difficult to apply the label to the compact disc without the appearance of wrinkles and other irregularities. Even if it is known to use different engagement devices for defining the position of the label in relation to the compact disc the previously known technique for applying the label provides for great difficulties.

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Another drawback in the previously known method of applying a label to a compact disc is the difficulties of loosening the label from the compact disc if it is afterwards necessary to adjust the position of the label on the disc. Such a subsequent adjustment can be necessary with regard to the fact that the label shall take a certain
20 position in relation to text provided on the compact disc.

The object of the invention is to provide a method of applying to a compact disc a label in which the difficulties and drawbacks mentioned above do not appear.

25 In order to comply with this object the method according to the invention is characterized in that small area portions of the covering sheet are removed from the adhesive layer of the label before the label is applied to the compact disc, that the label is with regard to its position by means of the engagement device thereupon applied to the compact disc by means of the portions of the adhesive layer from
30 which the covering sheet has been removed and that the label is in its entirety thereupon fastened to the compact disc by removing the covering sheet from the rest of the portions of the label.

A label for accomplishing this method has at a side surface an adhesive layer
35 provided with a cover3/13/05, EAST Version: 2.0.1.4at the covering sheet has

small area portions which are adapted to be separately removed from the adhesive layer for making it possible to fasten the label to the compact disc before the rest of the portions of the covering sheet are removed from the label.

5 A device for accomplishing the method according to the invention has a support surface for defining the position of the compact disc and a device for defining the position of the label in relation to the compact disc when the label is attached thereto.

10 It is suitable that the covering sheet is removed from the adhesive layer of the label at a strip-shaped portion extending diametrically over the label before the label is fastened to the compact disc. When the rest of the adhesive layer of the label shall be connected with the compact disc the portions of the covering sheet positioned at opposite sides of the strip-shaped portion are suitably turned back for uncovering the edge of said portions positioned adjacent the strip-shaped portion fastened to the compact disc whereupon these portions of the covering sheet are displaced
15 outwardly while separating the covering sheet from the adhesive layer while the label is by means of the adhesive layer fastened to the compact disc. It is suitable to fasten the portions of the label positioned at opposite sides of the strip-shaped portion by forcing said portions against the compact disc by means of a straight edge portion of
20 a plate.

It is suitable that the device for defining the position of the label in relation to the compact disc is constituted by a peg which is connected with the support surface through the central opening of the compact disc, the label being defined with regard
25 to its position in relation to the compact disc by the fact that an edge surface defining a central opening in the label is displaced into engagement with the peripheral surface of the peg. The peg can be used also for fixing the compact disc to the support surface. It is suitable that the peg is removed from the support surface when the label has been fastened to the compact disc by means of the portions of the
30 adhesive layer from which the smaller portions of the covering sheet has been removed which facilitates the connection of the rest of the portions of the label to the compact disc.

The peg can be connected with the support surface by means of a thread, by means
35 of a bayonet socket or by means of any other kind of a locking device.

By the fact that the label is initially fastened to the compact disc by means of small portions of the adhesive layer having small areas the connection of the rest of the parts of the adhesive layer to the compact disc is facilitated. It is also possible to
5 change the position of the label in relation to the compact disc because of the fact that only small portions of the label are initially connected to the compact disc.

The method according to the invention and the label and the device for accomplishing the method shall in the following be described with reference to the
10 accompanying drawings.

Fig. 1 shows a device for applying a label to a compact disc in accordance with the method according to the invention.

15 Fig. 2 shows a label to be used when accomplishing the method according to the invention.

Figs 3 – 5 show the different method steps when accomplishing the method according to the invention.

20 Fig. 6 shows a compact disc provided with a label.

Fig. 1 shows a device for applying a label of the kind shown in Fig. 2 to a compact disc in accordance with the method of the invention. The device comprises a circular
25 plate 2 and a peg 4 which is connectable with the central part of the plate. The plate 2 has a central, circular recess 6 having an outer limiting surface 8 corresponding to the diameter of a compact disc. The recess 6 has somewhat smaller depth than the thickness of the compact disc. The circular recess 6 has at its central portion a circular recess 9 for receiving a circular bead of the compact disc. At its central
30 portion the plate 2 has an opening 10 for connection of the peg 4.

The peg 4 has a lower circular portion 12 and an upwardly therefrom tapering guiding surface 14. The peg 4 has also a lower engagement surface 16 which is adapted to engage the compact disc around the central opening thereof so as to fasten the
35 compact disc to the plate 2 in the position in the recess 6. The peg 4 has a central,

downwardly directed projection 18 having sidewardly directed pins 20 cooperating with grooves in the opening 10 of the plate 2 for fixing the peg 4 to the plate 2 as a bayonet socket.

5 In Fig. 2 there is shown the label which according to the method of the invention shall be applied to the compact disc. In its initial position the label is of substantially square shape having a label part 22, an adhesive layer 24 applied thereto and a covering sheet 26 covering the adhesive layer. The covering sheet 26 has indications of fracture 28 making it possible to remove a strip-shaped portion 32 having at its
10 central portion a circular part 30 from the covering sheet. The label 22 has circular indications of fracture 34 and 36 by means of which the label is provided with the shape necessary for being connected with the compact disc.

As appears from Fig. 3 the compact disc 38 is positioned in the recess 6 of the plate
15 2, and the compact disc is fixed in the recess 6 by means of the peg 4 by introducing the projection 18 into the opening 10 of the plate 2 and the peg is fixed by means of the bayonet socket, the surface 16 of the peg 4 engaging the compact disc 38 around the central opening of the compact disc.

20 The label is thereupon prepared for being connected with the compact disc by removing the strip shaped portions 32 and the central circular part 30 of the covering sheet 26 as shown in Fig. 3. The central portion of the label 22 is thereupon removed along the indication of fracture 36 so that the label is provided with a central through opening which is defined by the edge surface 40. Thereupon, the adhesive layer 24
25 is exposed at a strip-shaped portion 42 extending diametrically over the label.

The label is thereupon turned so that the strip-shaped portion 32 of the adhesive layer is turned downwards, whereupon the label is applied against the compact disc while being guided by means of the edge surface 40 against the peg 4 until the edge
30 surface 40 encloses the circular part 12 of the peg 4. In this position the portion of the label defined by the indications of fracture 34 and 36 are centrally positioned on the compact disc 38. Thereby the strip-shaped portion 42 is fastened to the surface of the compact disc as shown in Fig. 4.

The peg 4 is thereupon removed and the portions 44 of the covering sheet positioned at opposite sides of the strip-shaped adhesive layer 42 are removed as shown in Fig. 5.

5 In Fig. 5 the plate 2 and the compact disc 38 supported thereby are shown with the label turned 90 ° in relation to the position of Fig. 4. The label is turned up at opposite sides of the strip-shaped portion connected with the compact disc as shown in Fig. 5, the inner edge 46 of the covering sheet being loosened from the label while the label is at the same time successively forced against the compact disc while the part 44 of
10 the covering sheet is at the same time removed by means of the edge 48 of a plate 50 so that the adhesive layer 24 adheres to the compact disc. Initially the compact disc is fixed in the circular recess 6 by the fact that the circular bead of the compact disc engages the circular groove 9. When the edge 48 of the plate 50 has passed the groove the fixing of the position is provided by the fact that the edge of the compact
15 disc engages the limiting surface 8 of the recess 6. When the two portions 44 of the covering sheet have been removed from the label itself and the label has by means of the adhesive layer 24 been connected with the compact disc 38 the outer part of the label 22 is removed along the indication of fracture 34. The compact disc with the label positioned thereon has thereupon the appearance as shown in Fig. 6.

20 By the fact that only a portion of the adhesive layer is exposed before the label is connected with the compact disc the handling of the label is facilitated and the establishment of wrinkles and other irregularities at the connection of the label to the compact disc are prevented. As the label is initially connected with the compact disc
25 only at the small strip shaped portion 42 it is easy to change the position of the label in relation to the compact disc if this is necessary with regard to the text and other symbols on the disc or for other reasons. The portions at opposite sides of the strip-shaped portion 42 of the adhesive layer to the compact disc is provided by means of the edge 48 of the plate 50 in a simple and efficient way.

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The invention can be modified within the scope of the following claims.

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C L A I M S

1. A method for applying to a compact disc (38) a label (22) having at a side surface an adhesive layer (24) covered by means of a covering sheet (26), the compact disc
5 being fixed with regard to its position on a support surface (6) having an engagement device (4) for positioning the label in relation to the compact disc, and the label being defined with regard to its position by means of the engagement device and being thereby fastened to the compact disc by means of the adhesive layer, characterized in that small area portions (32) of the covering sheet (26) are
10 removed from the adhesive layer (24) of the label before the label is fastened to the compact disc (38), that the label is thereupon fastened to the compact disc while being defined with regard to its position by means of the engagement device (4) by means of the portions (42) of the adhesive layer from which the covering sheet has been removed and that the label is in its entirety thereby fastened to the compact
15 disc by removing the covering sheet (26) from the other portions of the label (22).

2. A method as claimed in claim 1, characterized in that the covering sheet (26) is removed from the adhesive layer (24) of the label at a strip-shaped portion (42) extending diametrically over the label before the label is fastened to the
20 compact disc (38).

3. A method as claimed in claim 2, characterized in that the portions (44) of the covering sheet positioned at opposite sides of the strip-shaped portion (42) are folded back for exposing the edge of the portions positioned adjacent the strip-shaped portion fastened to the compact disc, thereupon are displaced outwardly
25 while the covering sheet (26) is separated from the adhesive layer (24) and the label is by means of the adhesive layer fastened to the compact disc.

4. A method as claimed in claim 3, characterized in that the portions of the label positioned at opposite sides of the strip-shaped portion (42) are fastened to the
30 compact disc by being forced against the compact disc by means of an edge portion (48) of a plate (50).

5. A method as claimed in any of the preceding claims, characterized in
35 that the engagement device is constituted by a peg (4) which is connected with the

support surface (6) through the central opening of the compact disc (38), and that the label is defined with regard to its position in relation to the compact disc by the fact that an edge surface (40) defining an opening in the covering sheet (26) is displaced into engagement with the peripheral surface of the peg.

5

6. A method as claimed in claim 5, characterized in that the peg (4) engages with the compact disc (38) around the central opening thereof by means of a surface portion (16) turned against the support surface for fixing the compact disc to the support surface when the peg is connected with the support surface (6).

10

7. A method as claimed in any of the preceding claims, characterized in that the engagement device (4) is removed from the support surface (6) when the label has been fastened to the compact disc by means of the portions (42) of the adhesive layer from which the small area portions (32) of the covering sheet (26) has been removed.

15

8. A label for a compact disc for accomplishing the method according to any of claims 1 – 7, the label having at a side surface an adhesive layer (24) provided with a covering sheet (26), characterized in that the covering sheet has small area portions (32) which are adapted to be separately removed from the adhesive layer (24) for making it possible to fasten the label to the compact disc before the rest of the portions (44) of the covering sheet are removed from the label.

20

9. A label as claimed in claim 8, characterized in that the small area portions (32) of the covering sheet has the shape of a strip-shaped portion extending diametrically over the label.

25

10. A label as claimed in claim 8 or 9, characterized in that the covering sheet has a central opening (30) adapted with its edge portions (40) to engage a device (4) for defining the position of the label in relation to the compact disc.

30

11. A label as claimed in claim 10, characterized in that the central opening (30) is adapted to be established by removing a part of the covering sheet (26).

12. A device for accomplishing the method as claimed in any of claims 1 – 7, characterized by a support surface (6) for defining the position of a compact disc (38) and a device (4) for defining the position of the label in relation to the compact disc when the label is applied thereto.

5

13. A device as claimed in claim 12, characterized in that the device for defining the position of the label in relation to the compact disc is constituted by a peg (4) which is connectable with the support surface (6) through the central opening of the compact disc (38).

10

14. A device as claimed in claim 13, characterized in that the peg (4) is connectable with the support surface (6) by means of a thread or by means of a bayonet socket.

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Fig.1.

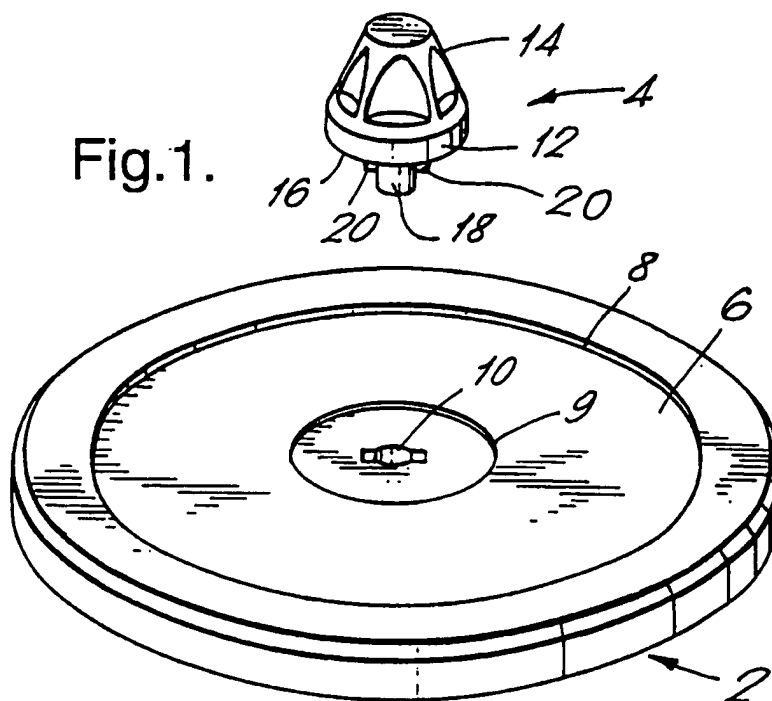
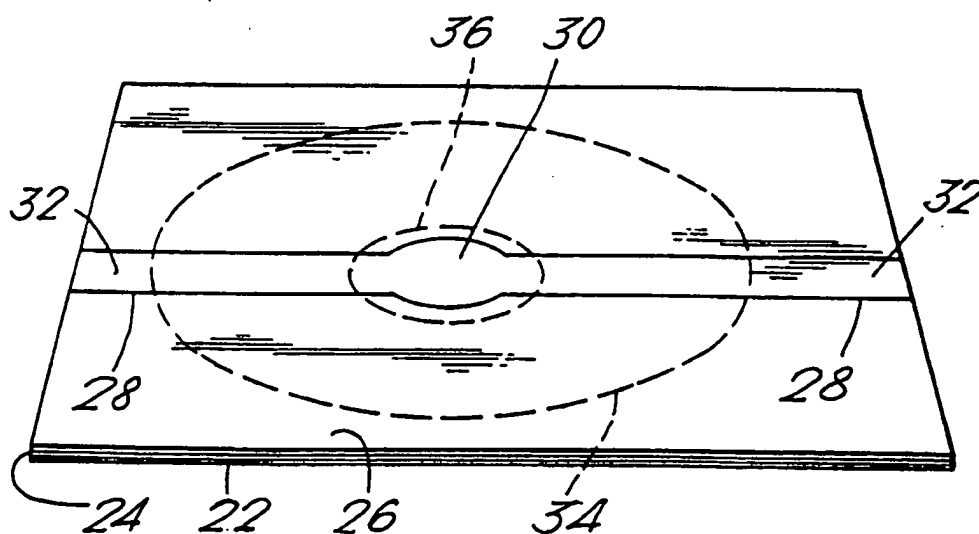
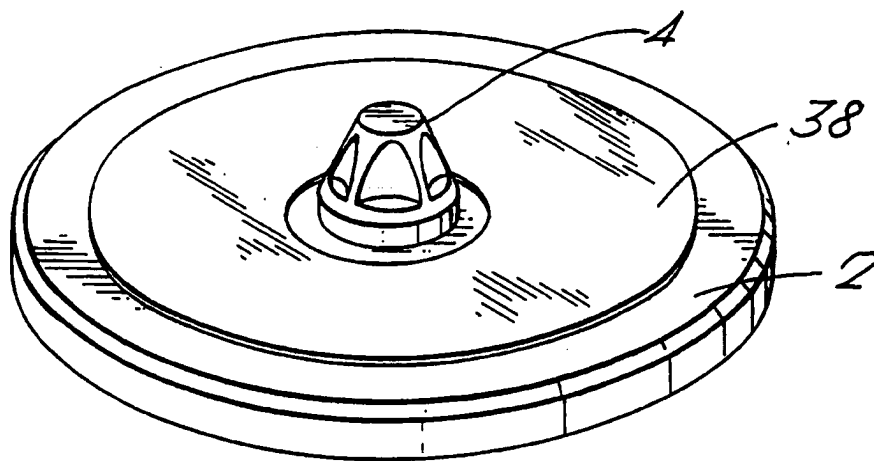
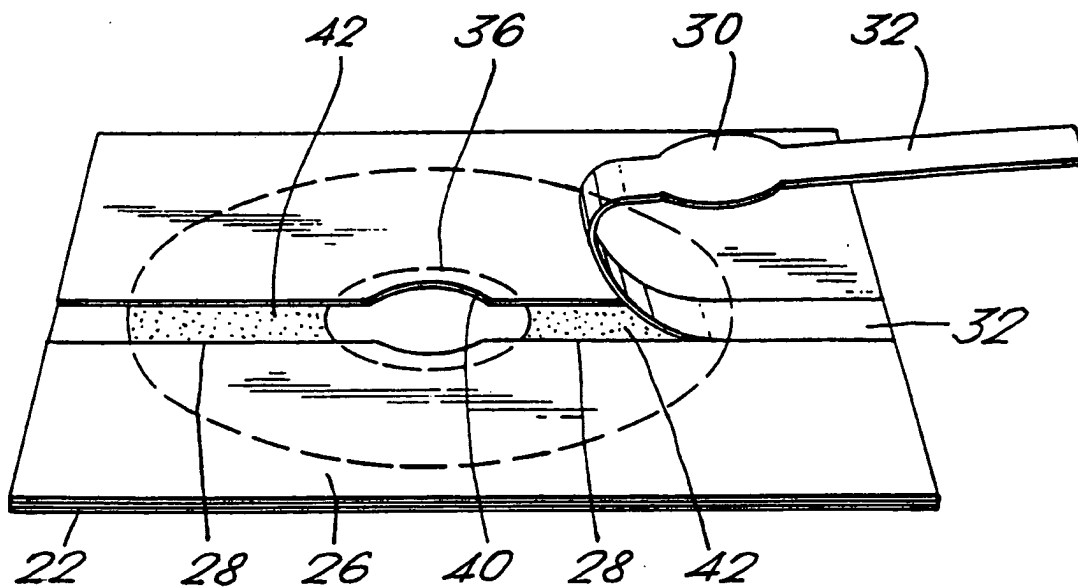


Fig.2.



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Fig.3.



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Fig.4.

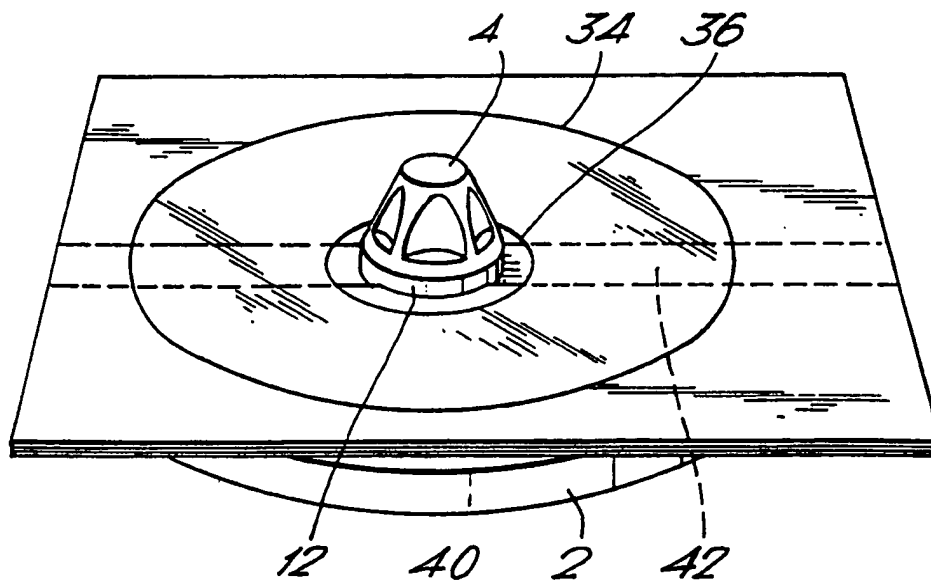
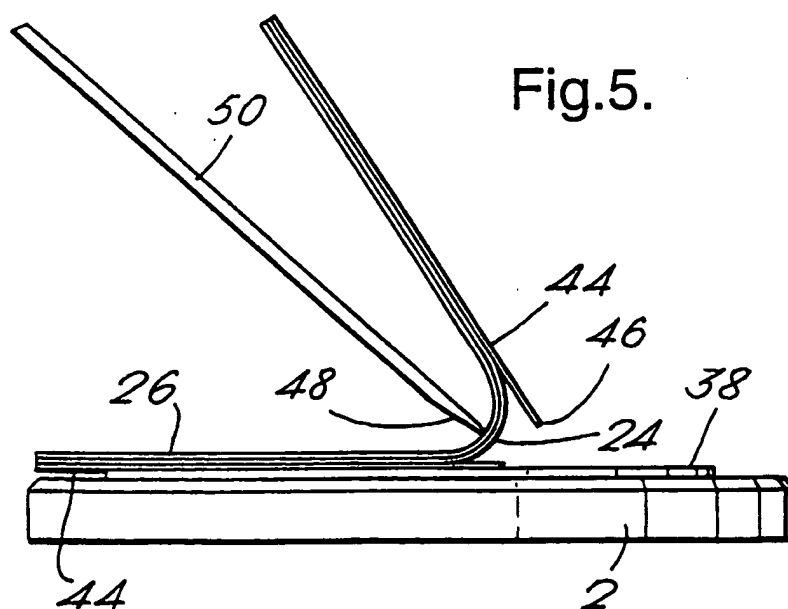
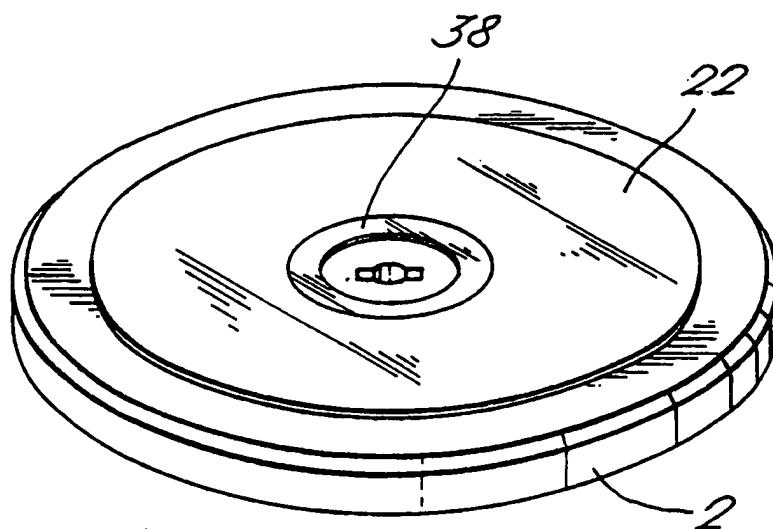


Fig.5.



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Fig.6.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 00/01962

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B65C 1/02, B65C 9/26, G09F 3/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: B65C, G09F, B31D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| Y | US 5783031 A (GAIL SIEVERS), 21 July 1998 (21.07.98), see the whole document -- | 1-14 |
| Y | SE 465744 B (THORD RÖNNGARD KULLEN), 21 October 1991 (21.10.91), see the whole document -- | 1-14 |
| A | DE 19758502 A1 (PHONOSOUND MUSIKPRODUKTIONS GMBH), 29 July 1999 (29.07.99) -- | 1-14 |
| A | DE 19620629 A1 (PHONOSOUND MUSIKPRODUKTIONS GMBH), 4 December 1997 (04.12.97) -- | 1-14 |

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| A | DE 19707043 A1 (ARNAS, STEVE), 3 Sept 1998 (03.09.98) -- | 1-14 |
| A | DE 29800367 U1 (ZWECKFORM Büro-PRODUKTE GMBH), 14 May 1998 (14.05.98) -- ----- | 1-14 |

INTERNATIONAL SEARCH REPORT
Information on patent family members

02/11/00

International application No.
PCT/SE 00/01962

| Patent document cited in search report | | | Publication date | Patent family member(s) | Publication date |
|---|----------|----|---------------------|----------------------------|---------------------|
| US | 5783031 | A | 21/07/98 | NONE | |
| SE | 465744 | B | 21/10/91 | SE 8901649 A | 10/11/90 |
| DE | 19758502 | A1 | 29/07/99 | DE 19723969 A | 01/10/98 |
| | | | | DE 29723612 U | 24/12/98 |
| | | | | AU 2951297 A | 09/12/97 |
| | | | | DE 29704279 U | 11/09/97 |
| | | | | EP 0900438 A | 10/03/99 |
| | | | | WO 9744787 A | 27/11/97 |
| DE | 19620629 | A1 | 04/12/97 | AU 2951297 A | 09/12/97 |
| | | | | EP 0900438 A | 10/03/99 |
| | | | | WO 9744787 A | 27/11/97 |
| DE | 19707043 | A1 | 03/09/98 | WO 9836973 A | 27/08/98 |
| DE | 29800367 | U1 | 14/05/98 | NONE | |